UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Ms. Erin Swiader
VACAPES EIS/OEIS PM
Code EV22ES
6506 Hampton BLVD
Norfolk, VA 23508-1278

August 11, 2008

Re: Virginia Capes Range Complex Draft Environmental Impact Statement/Overseas Environmental Impact Statement June 2008 CEQ #20080241

Dear Ms. Swaider:

In accordance with the National Environmental Policy Act (NEPA) of 1969 and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) offers the following comments regarding the Virginia Capes (VACAPES) Range Complex Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS). Based on our review, EPA has rated the environmental impacts of the DEIS as "EC" (Environmental Concerns) and the adequacy of the impact statement as "2" (Insufficient Information). A copy of EPA's ranking system is enclosed for your reference. The basis for this rating is contained in the remainder of this letter.

Project Description

The Department of the Navy (Navy) has prepared this DEIS to assess the potential environmental impacts over a 10-year planning horizon associated with the Navy Atlantic Fleet training; research, development, testing, and evaluation (RDT&E) activities; and associated range capability enhancements (including infrastructure improvements) in the VACAPES Range Complex. The Study Area includes the airspace, seaspace and undersea space from the mean high tide line seaward to the 3-nautical-mile boundary of the states of Delaware, Maryland, Virginia, North Carolina, and the lower Chesapeake Bay, where proposed Mine Warfare (MIW) training would occur.

Project Purpose and Need

The purpose of the proposed action is to:

- Achieve and maintain Fleet readiness using the VACAPES Range Complex to support and conduct current, emerging, and future training operations and RDT&E operations;
- Expand warfare missions supported by the VACAPES Range Complex; and
- Upgrade and modernize existing range capabilities to enhance and sustain Navy training RDT&E.

The need for the proposed action is to provide range capabilities for training and equipping combat-capable naval forces ready to deploy worldwide.

Alternatives

The DEIS evaluates three alternatives; they are:

1. The **No Action Alternative** that continues current operations.

2. **Alternative 1** would include all of the features of the no action and would implement enhancements to the minimal extent possible to meet the components of the Fleet Readiness Training Plan (FRTP) to implement the Fleet Response Plan (FRP). Alternative 1 would increase operational training, expand warfare missions, and accommodate force structure changes, which would include changing weapon systems and platforms, and homebasing new aircraft and ships.

3. **Alternative 2 (Preferred Alternative)** would include all of the enhancements of Alternative 1, plus it would include additional mine warfare training capabilities, the establishment of MIW training areas with small fields of mine shapes, and the implementation of additional enhancements to enable the range complex to meet future requirements. The Navy would also reduce the number of training events that involve dropping live, high explosive ordnance on targets at sea by 96% from the No Action Alternative.

As previously stated, the proposed action is to support and conduct current and emerging training and RDT&E operations in the VACAPES Range Complex. The decision by the Navy is to determine both the level and mix of training to be conducted and the range capabilities enhancements to be made within the VACAPES Range Complex that best meet the needs of the Navy. EPA understands the needs of the Navy, but has concerns with environmental impacts from the proposed action and requests more information specific to the lower Chesapeake Bay, hazardous materials, water quality, marine mammals/threatened and endangered species, historic preservation and cumulative impacts.

Thank you for the opportunity to offer these comments. If you have any questions, please contact Karen DelGrosso at (215)814-2765 or Barbara Okorn at (215)814-3330.

Sincerely,

William Arguto
Office of Environmental Programs
NEPA Team Leader

Specific Comments

Alternatives

- Based on the information provided on page 2-19, it is not clear what happens to the mine shapes in AMNS, RAMICS. The description says that they are expendable, inert, bottom and moored mine shapes. Does this mean they will stay in place permanently? Will the AMMNS explosive charge always be replaced with a ballast device? More details should be provided in the text of the FEIS.

- Based on the information provided on page 2-20, it is not clear if there is an impact to environmental receptors from OASIS and AN/AQS-20 acoustics and sonar.

- Page 2-24, Instrumented Training Area (South) – states that "Because both systems operate on or just below the surface, their training areas can be in shallow water. Both these factors dictate the need for a mine training area in the lower Chesapeake Bay,…." It is unclear why this activity must take place in the Bay. The rationale for using this valuable resource should be described further.

Lower Chesapeake Bay

- The Preferred Alternative, Alternative 2, proposes additional mine warfare training areas to be established in the lower Chesapeake Bay. Non-explosive mine shapes would be deployed in these areas to simulate a threat minefield. Table 2.2-4, Current and Proposed Operations in the VACAPES Study Area, lists the Mine Warfare (MIW) operations, but does not clearly distinguish the activity associated with the additional mine warfare training areas to be established in the lower Chesapeake Bay. This should be clarified.

- Table 2.2-1, labeled "VACAPES Study Area Typical Operations Included in this EIS/OEIS [a/6]" notes under MIW, Mine countermeasures exercise, the description of operation and the training area location. Since the training area noted is in the lower Chesapeake Bay, it is assumed that the proposed additional mine warfare training area in the lower Chesapeake Bay is represented here. Thus, the exercises would train forces to detect, identify, classify, mark, avoid, and disable (or verify destruction of) sea mines using a variety of methods, including air, surface, and subsurface assets. However, the level and specific kind of activity associated with the proposed mine areas should be discussed. The specific training activity connected with the minefields should be clearly explained to have an understanding of the operation of the minefield. This information would help to better assess the environmental impacts associated with the minefield, training activities and its impact to the lower Chesapeake Bay. In addition, [(6)] in the title of Table 2.2-1 is not defined in the key, only [(a)] is mentioned.

- Page 3-11 states that "Alternative 2 would increase the number of explosions used for mine countermeasure and mine neutralization training about eight-fold compared to the No Action Alternative." The location of these explosions should be identified and indicated on a map. The impact of these explosions should be discussed in the FEIS.

- Page 3-12 states, "Based on the studies at the CFMETR, the volume of military expended materials that would result from Alternative 2 would not measurably affect sediment quality." The acronym, CFMETR, is not included on the List of Acronyms and Abbreviations. The FEIS should identify CFMETR and elaborate to determine credibility of the studies performed and cited.

- The habitat and importance of the Chesapeake Bay should be discussed in greater detail. This should include native oyster restoration efforts and any necessary coordination.

- In June of 2000, the State of Maryland signed the Chesapeake 2000, a new Agreement for restoration of the Chesapeake Bay. This agreement is commonly referred to as "C2K." Together with the Commonwealth of Virginia, the Commonwealth of Pennsylvania, the District of Columbia, the U.S. Environmental Protection Agency and the Chesapeake Bay Commission, the signatories pledged to achieve over 100 specific actions designed to restore the health of the Bay and its living resources. These actions, called the Chesapeake 2000 commitments, are grouped into the Agreement's five major categories. Vital habitat protection and restoration, water quality protection and restoration, sound land use, stewardship and community engagement. The EIS should explain how the proposed action relates to this agreement and any necessary mitigation.

Hazardous Materials/Hazardous Waste

- Page 3-29 states, "Military munitions are not considered hazardous waste when used for their intended purposes, which include training of military personnel and research and development activities. This includes almost all missiles, munitions, and targets used at the VACAPES Study Area. A review of the use of munitions and targets was conducted and their hazardous constituents' disposition was analyzed. The components that contain hazardous constituents include propellants, batteries, flares, telemetry, igniters, jet fuel, diesel fuel, hydraulic fluid, and explosive warheads." Hazardous wastes have impacts on the environment regardless of military munitions not considered hazardous waste when used for their intended purposes. It is not clear what exactly is meant by this quote. Does the Navy still consider impacts caused by hazardous waste from military munitions or does it not even evaluate potential impacts because they are used for military intended purposes? This should be clarified in the FEIS.

- Page 3-30, states that "Discarded training materials would be deposited in offshore areas, become buried in the sea floor sediment, and have no measurable effects." Is it possible to estimate the amount of training materials to be discarded each year for the proposed action (considering also the cumulative materials from other operations) to reasonably assess an accumulation of debris annually? This figure multiplied by the number of years of intended training would prove to be a better indicator of disposed materials impacting the environment? Are the offshore areas identified where discarded training materials

will be deposited? If so, this would be meaningful to identify in the FEIS. In addition, it is noted on page 6-20, "The primary effect of the Navy's training activities in the VACAPES Study Area would be the deposition of expended training materials and their accumulation overtime." Expended training materials, discarded training materials combined with other actions of the same nature could result in a considerable amount of materials in the water/sediments.

- Page 3-8—it is unclear why 20 years was used to evaluate accumulation of materials in the ocean. This should be explained. It seems that materials could last longer than 20 years.

- Page 3-8 references a study of sediment quality. It is unclear how this study relates to the conditions in the VACAPES Study Area and Bay. More information should be provided. For example are sediment types the same, etc?

- We request additional information regarding efforts to minimize and reduce the amounts of hazardous materials deposited into the ocean from training material expenditures.

- Bioaccumulation of contaminants in the food chain should be discussed. The DEIS indicates that any contaminants may be spread out over the Study Area will not adversely impact the sediment or water quality. While the Navy believes that in this situation the contaminants may not be directly toxic in water or sediments, the bioaccumulation pathway should be discussed.

Water Quality

- Page 3-32 states that "It was determined that no water quality modeling or monitoring was specifically required for a complete and thorough analysis of training operations in the VACAPES Range Complex." The FEIS should discuss the basis for this determination.

- Page 6-22 states that "water quality in the marine environment is affected by Gulf Stream currents, temperature and salinity, sediment transport and deposition, and water and air pollutants from inland streams and emissions sources." The DEIS does not address the effect of potential temperature changes caused by the proposed actions on water quality. Potential changes in water temperature should also be discussed in terms of climatic fluctuations and global warming. The cumulative effects from these varied elements should be discussed.

Marine Mammals/ Threatened and Endangered Species

- Page 3-139 states that "documented occurrences for the fin whale in the Chesapeake Bay area are from February through May, with the greatest likelihood of encounter between January and March." It is unclear where January comes from.

- The FEIS should clearly explain how far the mammals have to be from the sonar to be impacted. Will the monitors be able to see the mammals before they have the potential to be impacted by sonar?

- Page 3-193 states that detonations will be suspended if a marine mammal enters the Zone of Influence and will only restart after the area has been clear for a full 30 minutes. What is the rational for 30 minutes?

- Page 3-211 and all other appropriate locations – the definition of "no significant impact" to marine mammals under NEPA should be clearly explained.

- The Navy should continue to coordinate with the appropriate state and federal agencies regarding endangered species and Important Bird Areas (page 3-328).

- Up to date coordination letters from other agencies should be provided, including threatened and endangered species.

Historic Preservation

- Page 3-329 states, "As part of the NEPA process, consultation will be held with the state historic preservation officers of Delaware, Maryland, Virginia, and North Carolina; American Indian tribes; and public, state, and federal agencies." However, it does not appear that the State Historic Preservation Officers (SHPO) in all of the states are included in the Distribution List in Chapter 10. The FEIS should indicate the level of involvement with the SHPOs. Consultation with the SHPOs throughout the planning process is recommended.

Cumulative Impacts

- The DEIS briefly discusses other Navy actions, but should discuss cumulative impacts of these actions in more detail. Will there be any added impact to environmental receptors as a result of these projects? Page 6-8 discusses a 1997 Biological Opinion for the southeastern portion of the United States and a 2002 Biological Opinion for North Carolina. It is unclear if a larger area of the east coast, including the VACAPES Study Area was evaluated. For example could these projects impact marine mammal migration or bird migration?

Miscellaneous

- Page 3-364 states that there was coordination with the Federal Aviation Administration (FAA). Does FAA "approve" of the preferred alternative?

- Are there additional impacts from the use of contractor aircraft, including increased activity on roads, other transportation issues, etc? This should be discussed in the FEIS.